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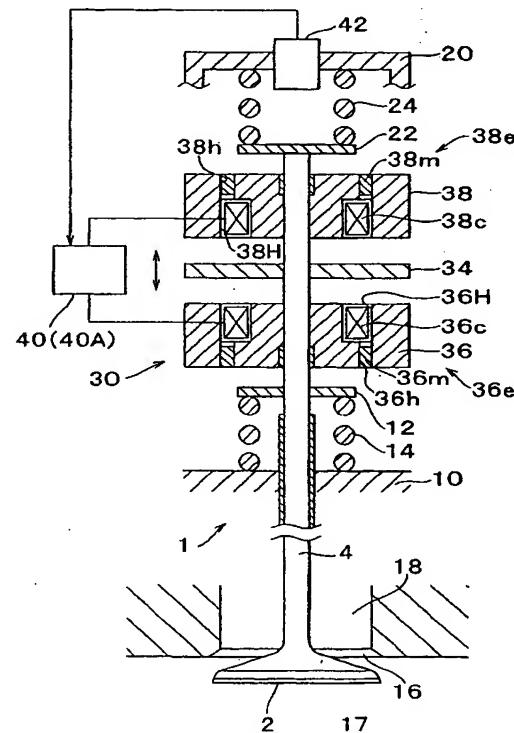
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(54) **Apparatus and method for detecting change of neutral position of valve of electromagnetic valve actuation system, and apparatus and method for controlling the valve**

(57) A valve (1) is urged in the valve-opening direction by an upper spring (24) and in the valve-closing direction by a lower spring (14). The valve (1) is thus urged to a neutral position where the respective urging forces are balanced. The valve (1) is controlled to be released from one of two terminal positions, that is, the full-open position or the full-closed position, and to be attracted to the position from which the valve (1) has been released. The displacement pattern of the valve during this period is sensed by a displacement amount sensor (42), whereby the maximum displacement amount of the valve (1) from that terminal position is measured. The change of the neutral position is detected based on the change of the measured maximum displacement amount with respect to a reference value.

FIG. 1





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EUROPEAN SEARCH REPORT

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F01L			
The present search report has been drawn up for all claims			
Place of search	Date of completion of the search	Examiner	
THE HAGUE	10 June 2003	Klinger, T	
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